

What is claimed is:

1. An image generation method for generating an image comprising:  
storing object data in an object data storage section;  
5 disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;  
controlling a virtual camera; and  
generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing,  
10 the method further comprising:  
disposing in the object space a model object including a plurality of part objects each of which has a projection shape, each of the part objects having a projecting portion formed on a display surface on which an image is drawn; and  
rotating each of the part objects based on rotational information of the virtual  
15 camera so that the display surface of each of the part objects is directed toward the virtual camera.
2. The image generation method as defined in claim 1, comprising:  
storing a Z texture in which an offset value of a Z-value is set on each texel in a  
20 texture storage section; and  
mapping the Z texture stored in the texture storage section on each of the objects,  
the method further comprising:  
mapping on each of the part objects the Z texture for setting bump shapes on  
25 the display surface by pixel unit.
3. An image generation method for generating an image comprising:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

5 storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects;

controlling a virtual camera; and

10 generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing,

the method further comprising:

disposing a model object having a plurality of part objects in the object space;

15 rotating each of the part objects based on rotational information of the virtual camera so that a display surface of each of the part objects on which an image is drawn is directed toward the virtual camera; and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects.

4. The image generation method as defined in claim 1, comprising:

20 disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;

disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and

25 rotating each of the part objects about the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the Y-axis while being directed toward the column-shaped part object.

5. The image generation method as defined in claim 3, comprising:  
disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;  
disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and  
rotating each of the part objects about the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the Y-axis while being directed toward the column-shaped part object.

6. The image generation method as defined in claim 1, comprising:  
disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;  
disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and  
rotating each of the part objects about an X-axis which is perpendicular to the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the X-axis while being directed toward the column-shaped part object.

7. The image generation method as defined in claim 3, comprising:  
disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;  
disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and  
rotating each of the part objects about an X-axis which is perpendicular to the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the X-axis which is perpendicular

to the Y-axis while being directed toward the column-shaped part object.

8. The image generation method as defined in claim 1,  
wherein the part objects include a first part object and a second part object, the  
5 first and second part objects being adjacent each other,  
the method further comprising:

disposing the first and second part objects so as to overlap each other in a view  
image viewed from the virtual camera or intersect each other even when the virtual  
camera rotates 360 degrees about a given coordinate axis.

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9. The image generation method as defined in claim 3,  
wherein the part objects include a first part object and a second part object, the  
first and second part objects being adjacent each other, and

15 disposing the first and second part objects so as to overlap each other in a view  
image viewed from the virtual camera or intersect each other even when the virtual  
camera rotates 360 degrees about a given coordinate axis.

10. A program for generating an image, the program causing a computer to  
implement processing of:

20 storing object data in an object data storage section;  
disposing a plurality of objects in an object space, based on the object data  
stored in the object data storage section;

controlling a virtual camera; and

25 generating an image viewed from the virtual camera in the object space while  
performing hidden surface removal processing,

the program further causing a computer to implement processing of:

disposing in the object space a model object including a plurality of part

objects each of which has a projection shape, each of the part objects having a projecting portion formed on a display surface on which an image is drawn; and

rotating each of the part objects based on rotational information of the virtual camera so that the display surface of each of the part objects is directed toward the  
5 virtual camera.

11. The program as defined in claim 10, the program causing a computer to implement processing of:

storing a Z texture in which an offset value of a Z-value is set on each texel in a  
10 texture storage section; and

mapping the Z texture stored in the texture storage section on each of the objects,

the program further causing a computer to implement processing of:

mapping on each of the part objects the Z texture for setting bump shapes on  
15 the display surface by pixel unit.

12. A program for generating an image, the program causing a computer to implement processing of:

storing object data in an object data storage section;  
20 disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the  
25 objects;

controlling a virtual camera; and

generating an image viewed from the virtual camera in the object space while

performing hidden surface removal processing,

the program further causing a computer to implement processing of:

disposing a model object having a plurality of part objects in the object space;

rotating each of the part objects based on rotational information of the virtual

5 camera so that a display surface of each of the part objects on which an image is drawn is directed toward the virtual camera; and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects.

10 13. The program as defined in claim 10, the program causing a computer to implement processing of:

disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;

15 disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and

rotating each of the part objects about the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the Y-axis while being directed toward the column-shaped part object.

20 14. The program as defined in claim 12, the program causing a computer to implement processing of:

disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;

25 disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and

rotating each of the part objects about the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera

rotates about the Y-axis while being directed toward the column-shaped part object.

15. The program as defined in claim 10, the program causing a computer to implement processing of:

5 disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;

disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and

10 rotating each of the part objects about an X-axis which is perpendicular to the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the X-axis while being directed toward the column-shaped part object.

16. The program as defined in claim 12, the program causing a computer to implement processing of:

disposing a column-shaped part object included in the model object so as to stand along a Y-axis, the Y-axis being an axis along a vertical direction;

disposing each of the part objects at a position apart from a central axis of the column-shaped part object; and

20 rotating each of the part objects about an X-axis which is perpendicular to the Y-axis so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera rotates about the X-axis while being directed toward the column-shaped part object.

25 17. The program as defined in claim 10,

wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the program causing a computer to implement processing of:

disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

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18. The program as defined in claim 12,

wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the program causing a computer to implement processing of:

10 disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

19. A computer-readable information storage medium storing the program as  
15 defined in claim 10.

20. A computer-readable information storage medium storing the program as defined in claim 12.

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